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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Bernd Sachweh

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EXAMINER

FLETCHER III, WILLIAM P

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

11/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,858	<b>Applicant(s)</b> SACHWEH ET AL.	
	<b>Examiner</b> William P. Fletcher III	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-34 and 36 is/are rejected.
- 7) ☒ Claim(s) 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

\*\*\*Claims 14-34 were rejected under 35 USC 103(a) in the Office action mailed April 4, 2008, as correctly indicated on the form PTOL-326 accompanying that Office action.\*\*\*

#### ***Response to Amendment***

1. The compliant amendment filed August 28, 2008, and the remarks filed July 7, 2008, are noted with appreciation.
2. Claims 14-36 are now pending.

#### ***Response to Arguments***

3. The objections to the abstract and specification are withdrawn in view of the amendment.
4. Applicant's arguments filed July 7, 2008, with respect to the rejection of claims 14-34 under 35 USC 103(a) as obvious in view of US '187 set forth in the prior Office action, have been fully considered but they are not persuasive. The Examiner's position, articulated in the prior Office action, is that both the particle velocity and particle size are result-effective variables. Applicant has neither argued nor presented evidence that particle velocity and particle size are not result-effective variables. Consequently, it must be assumed that Applicant's traversal is meant to be a rebuttal of the presumption of obviousness based on the result-effective nature of these variables. This can be done by showing: (1) that the prior art taught away from the claimed invention; or (2) that there are new and unexpected results relative to the prior art. See MPEP 2144.05(III). With respect to (1), Applicant has not argued that US '187 teaches away from the claimed invention. With respect to (2), Applicant has not demonstrated that the result(s)

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of using the claimed velocities and sizes is/are new and unexpected relative to the prior art. Rather, Applicant argues that the particle sizes and velocities are merely functional (i.e., they result in coating of the substrate). Consequently, Applicant's remarks are not persuasive.

5. The burden is on Applicant to establish that any results are unexpected and significant. Any evidence relied upon should establish that the differences in results are, in fact, unexpected and unobvious and of both statistical and practical significance. See MPEP 716.02(b)(I). As noted above, Applicant merely states that the claimed velocities and particle sizes have been found to be operable, but offers no argument that such a result is unexpected, unobvious, and of statistical and practical significance. Without asserting the unexpected nature of the results, Applicant does make reference to examples V1-V6 in the instant specification. Even if these results were to be asserted as evidence of unexpected results, they would not weigh against the *prima facie* case of record since they are not commensurate in scope with the claimed subject matter. See MPEP 716.02(d) which explains that objective evidence of nonobviousness must be commensurate in scope with the claims which with the evidence is offered to support. In other words, the showing of unexpected results must occur over the *entire claimed range*. The results are summarized as follows:

<u>Example</u>	<u>Velocity (m/s)</u>	<u>Size (d<sub>e</sub> x h x d<sub>i</sub>)**</u>
V1	1	8 x 6 x 5
V2	2	8 x 6 x 5
V3	1	8 x 6 x 5
V4	2	8 x 6 x 5
V5	1.74 <sup>*</sup>	5 x 3 x 2
V6	0.93 <sup>*</sup>	5 x 3 x 2

The broadest range of velocity claimed is 0.1 to 4 m/s, while examples of 0.93, 1, 1.74, and 2 are given. Consequently, even if unexpected results over this range were being argued, they would not be commensurate in scope with the claimed range. With respect to particle size, no particle sizes are given in micrometer units, as claimed. As such, even if unexpected results over this range were being argued, they too would not be commensurate in scope with the claimed range.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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<sup>\*</sup> These velocities are referred to as “aerosol empty pipe velocity” and it is unclear how they relate to the “aerosol velocity” tabulated for examples V1-V4 at page 8 of the spec.

<sup>\*\*</sup> These appear to be ratios of dimensions and it is unclear how they relate to the single dimensions given in micrometers in the claims.

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 14-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,821,187 A.

A. Claims 14-34 are rejected for the same reasons as set forth under this heading in the prior Office action.

B. With respect to new claim 36, as noted in the prior Office action, particle size is a result-effective variable that would have been obvious to optimize by routine experimentation, absent evidence of unexpected results demonstrating the criticality of the claimed subject matter. See MPEP 2144.05.

***Allowable Subject Matter***

9. Claim 35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: The reasons remain the same as set forth under this heading in the prior Office action.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Sunday, 5:00 AM - 12:00 PM and Monday through Friday, 5:00 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Phillip Fletcher III/  
Primary Examiner, Art Unit 1792

16 November 2008